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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,350	12/04/2003	Jeng-Shyong Wu	71230	8614
23872	7590	03/09/2005	EXAMINER	
MCGLEW & TUTTLE, PC 1 SCARBOROUGH STATION PLAZA SCARBOROUGH, NY 10510-0827			NGUYEN, CHAU N	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/728,350

**Applicant(s)**

WU, JENG-SHYONG

**Examiner**

Chau N. Nguyen

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 41-48 is/are allowed.
- 6) ☒ Claim(s) 9-28 and 33-36 is/are rejected.
- 7) ☒ Claim(s) 29-32 and 37-40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/21/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 10, 11, 29, 37 and 41 are objected to because of the following informalities:  
  
in claim 10, line 3, before "slim" insert --first--,  
  
in claim 10, line 5, change the phrase "said two or more metals or two or more single distinct alloys" to --another metal or alloy--, see claim 18 for example,  
  
in claim 11, lines 2-3, "said plurality of slim electric wires" is not clear to which wires in which bundle,  
  
in claim 29, line 2, before "includes" insert --in said double wire cable--,  
  
in claim 37, line 2, before "includes" insert --in said at least two bundle wire cables--,  
  
in claim 41, line 6, delete "further",  
  
in claim 41, line 7, change "alloys and" to --alloys--,  
  
in claim 41, line 8, delete "further",  
  
in claim 41, line 12, delete "further". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 9, 10, 25, 26, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Bogner et al. (3,428,926).

Bogner et al. discloses a wire cable of electrical conductors formed of multiple metals or alloys, comprising a double bundle wire cable including a first bundle of conductors and a second bundle of conductors, the first bundle of conductors including a plurality of slim electric wires (11,12) made by two metals, the second bundle of conductors including a plurality of slim electric wires (13) made by a single metal, wherein the first and second bundles of conductors are covered by an insulator (14) to form the wire cable of electrical conductor (re claim 9).

Bogner et al. also discloses the slim wire made by two metals including one metal being contained within another metal (re claims 10, 26, 34). Re claims 25 and 33, Bogner et al. discloses one bundle comprising slim wires made by two metals (11,12) and at least one slim wire made by a single metal (13) and another bundle comprising slim wires made by a single metal (13), wherein the two bundles are covered by an insulator (14) to form the wire cable.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11, 12, 27, 28, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bogner et al.

Bogner et al. discloses the invention substantially as claimed, however Bogner et al. does not specifically disclose the slim wires being arranged in parallel or being wound to form a bundle. It would have been obvious to one skilled in the art that depending on the specific use of the resulting wire, to arrange the slim wires of Bogner et al. in parallel or to wind them together to form a bundle since arranging strands or winding strands to form a wire bundle is well-known in the art.

6. Claims 9 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick (6,498,300) in view of Shimizu et al. (JP02-148513).

Flick discloses a wire cable comprising a plurality of bundles (27) each bundle including a single wire cable covered to form a cable wire (25) (re claim 13) and an outer layer of insulator (28) encircling the single wire cables (re claim 15). Flick does not disclose the first bundle of conductors including a plurality of slim electric wires made by two metals and the second bundle of conductors including a plurality of slim electric wires made by a single metal (re claim 9). Shimizu et al. discloses a wire cable comprising a plurality of bundles (Figure 1), wherein one of the bundles comprising slim wires made by two metals and another of the bundles comprising slim wires made by a single metal (see the abstract). It would have been obvious to one skilled in the art to apply the teaching of Shimizu et al. in the wire cable of Flick, such as providing one of the bundles with slim wires made by two metals and another of the bundles with slim wires made by a single metal, to enhance the flexibility property of the wire cable without damaging its electrical conductivity. Re claim 14, it would have been obvious to one skilled in the art to wind

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the cable wires (25) of Flick to form the large wire cable since a large wire cable having cable wires wound together is well-known in the art.

7. Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (5,296,648) in view of Shimizu et al.

Johnson discloses a wire cable comprising a plurality of bundles (16,18,20), each bundle being covered by an outer insulator which is pressed out in one motion to form altogether the wire cable (re claim 16). Johnson does not disclose the first bundle of conductors including a plurality of slim electric wires made by two metals and the second bundle of conductors including a plurality of slim electric wires made by a single metal (re claim 9). Shimizu et al. discloses a wire cable comprising a plurality of bundles (Figure 1), wherein one of the bundles comprising slim wires made by two metals and another of the bundles comprising slim wires made by a single metal (see the abstract). It would have been obvious to one skilled in the art to apply the teaching of Shimizu et al. in the wire cable of Johnson, such as providing one of the bundles with slim wires made by two metals and another of the bundles with slim wires made by a single metal, to enhance the flexibility property of the wire cable without damaging its electrical conductivity.

8. Claims 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bogner et al. in view of Flick.

Bogner et al. discloses a bundle of conductors including a plurality of slim wires made by two metals (11,12) and at least a slim wire (13) made by a single metal, wherein the bundle is

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covered by an insulator to form a component cable. Bogner et al. does not disclose a plurality of such bundles being adjacent to one another to form a wire cable. Flick discloses a wire cable comprising a plurality of bundles (25) which are adjacent to one another to form a wire cable. It would have been obvious to one skilled in the art to use a plurality of bundles of Bogner et al. to form a wire cable taught by Flick to form a multiple-core cable for multiple transmission purposes (re claim 17).

The modified Bogner et al. wire cable also discloses the two metal wire made by one metal being contained within another metal (re claim 18), each bundle including a single wire cable covered to form a cable wire (re claim 21). Re claims 19 and 20, it would have been obvious to one skilled in the art that depending on the specific use of the resulting wire, to arrange the slim wires of Bogner et al. in parallel or to wind them together to form a bundle since arranging strands or winding strands to form a wire bundle is well-known in the art. Re claims 22 and 23, it would have been obvious to one skilled in the art to wind the cable wires (25) of Flick to form the large wire cable since a large wire cable having cable wires wound together is well-known in the art.

9. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bogner et al. in view of Flick as applied to claim 17 above, and further in view of Johnson.

Claim 24 additionally recites each bundle being covered by an outer insulator which is pressed out in one motion to form altogether the wire cable. Johnson discloses a wire cable comprising a plurality of bundles each being covered by an outer insulator which is pressed out in one motion to form altogether the wire cable. It would have been obvious to one skilled in the

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art to apply the teaching of Johnson in the modified wire cable of Bogner et al. to keep the bundles together.

***Allowable Subject Matter***

10. Claims 41-48 are allowed.

11. Claims 29-32 and 37-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a wire cable comprising all the features as recited in the claims and in combination with each bundle in the double wire cable including a single wire cable covered to form a cable wire (re claims 29, 37), each bundle being covered by an outer insulator which is pressed out in one motion to form altogether the wire cable (re claims 32, 40), the wire cable comprising a first bundle including slim wires made by two or more metals or two or more metal alloys, the second bundle including slim wires made by two or more metals or two or more metal alloys and slim wires made by a single metal or alloy, and the third bundle including slim wires made by single metal or alloy (re claim 41).

***Response to Arguments***

13. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection except for the following.



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Applicant primarily argues that Bogner et al. does not disclose a wire cable comprising bundles. This argument is not found persuasive. Bogner et al. does disclose two distinct bundles which are covered to form a wire cable as claimed. Specifically, Bogner et al. discloses first bundle comprising wires made by two metals (11, 12) and another bundle comprising wires made by single metal (13). These two bundles are covered by an insulator to form a wire cable.

### *Summary*

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### *Communication*

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N. Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen  
Primary Examiner  
Art Unit 2831